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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/788,465	03/01/2004	Takayoshi Yoshida	042151	9261

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EXAMINER

ABDULSELAM, ABBAS I

ART UNIT	PAPER NUMBER
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2629

MAIL DATE	DELIVERY MODE
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05/03/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/788,465	Applicant(s) YOSHIDA ET AL.	
	Examiner Abbas I. Abdulsalam	Art Unit 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 February 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3-5 and 15-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15 and 17 is/are allowed.
- 6) ☒ Claim(s) 3-5 and 16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to a communication filed on April 21, 2007. Claims 3-5 and 15-17 are pending. Claims 1-2, 6-14 and 18-20 are canceled.

Response to Arguments

2. Applicant's arguments filed on 02/14/07 have been fully considered but they are not persuasive.

Applicant argues that the reference cited, Velayudhan et al. (USPN 6803890) does not teach a set period in which the voltage of both ends of the light emitting element whose lighting is to be driven in a scan period is set at a predetermined voltage value at a beginning of said scan period corresponding to one scan line so that drive current for holding the constant intensity state is given to the light emitting element within the intensity increase period.

However, as shown in the art rejection below, Velayudhan teaches as shown in FIG. 3 a Positive Non-Ramped Modulating Pulse (flat plateau). Section 'A' is the rise time (with $V_{sub.1} - V_{sub.ref}$ equaling the threshold voltage) and section 'C' is the fall time and section 'B' is the flat plateau. (Fig. 3, on the time axis corresponding to regions A, B, C, and col. 3, lines 51-53). It is inherent that section B, which is located between the end of the rise time and the beginning of the fall time in the time axis of Fig. 3 has some time elapsed during a constant voltage application.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 3-5 and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Velayudhan et al. (USPN 6803890).

Regarding claim 3, Velayudhan teaches a drive method for the light emitting display panel in which light emitting elements are connected at respective crossing points between a plurality of data lines, a plurality of scan lines so that the light emitting elements connected to the respective scan lines are sequentially selectively lighted by sequentially scanning the scan lines (Fig. 7 (scan pulse voltage, column drive), Fig. 7 (R1, Rn, C1, Cn, electrode row, electrode column), E1 display, Fig. 8, col. 5, lines 24-26 and col. 6, lines 1-6) there is provided the intensity increase period in which a lighting intensity of the light emitting element is gradually increased allowing the lighting intensity to reach the constant intensity state within the predetermined period from the scan start in one scan period, wherein there is provided a set period in which the voltage of both ends of the light emitting element whose lighting is to be driven in a scan period is set at a predetermined voltage value at a beginning of said scan period

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corresponding to one scan line so that drive current for holding the constant intensity state is given to the light emitting element within the intensity increase period (see Fig. 3, on the time axis corresponding to regions A, B, C, and col. 3, lines 51-53).

Regarding claim 4, Velayudhan teaches a drive method for a light emitting display panel in which light emitting elements are connected at respective crossing points between a plurality of data lines, a plurality of scan lines so that the light emitting elements connected to the respective scan lines are sequentially selectively lighted by sequentially scanning the scan lines (Fig. 7 (scan pulse voltage, column drive), Fig. 7 (R1, Rn, C1, Cn, electrode row, electrode column), E1 display, Fig. 8, col. 5, lines 24-26 and col. 6, lines 1-6) there is provided the intensity increase period in which a lighting intensity of the light emitting element is gradually increased allowing the lighting intensity to reach the constant intensity state within the predetermined period from the scan start in one scan period, wherein there is provided a set period in which the voltage of both ends of the light emitting element whose lighting is to be driven in a scan period is set at a predetermined voltage value immediately before a scan period corresponding to one scan line so that current which is different from drive current which is for holding the constant intensity state is given to the light emitting element within the intensity increase period (see Fig. 3, on the time axis corresponding to regions A, B, C and col. 3, lines 51-53).

Regarding claim 5, Velayudhan teaches the value of voltage which is applied to both ends of the light emitting element in the set period is set at a voltage value which does not reach

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the forward voltage of the light emitting element in the constant intensity state (see Fig. 3, on the time axis corresponding to regions A, B, C and col. 3, lines 51-53).

Regarding claim 16, Velayudhan teaches a drive device for a light emitting display panel in which light emitting elements are connected at respective crossing points between a plurality of data lines, a plurality of scan lines so that the light emitting elements connected to the respective scan lines are sequentially selectively lighted by sequentially scanning the scan lines (Fig. 7 (scan pulse voltage, column drive), Fig. 7 (R1, Rn, C1, Cn, electrode row, electrode column), E1 display, Fig. 8, col. 5, lines 24-26 and col. 6, lines 1-6) there is provided the intensity increase period in which a lighting intensity of the light emitting element is gradually increased allowing the lighting intensity to reach the constant intensity state within the predetermined period from the scan start in one scan period, wherein there is provided a voltage setting means for setting the voltage of both ends of the light emitting element whose lighting is to be driven in a scan period at a predetermined voltage value at a beginning of said scan period corresponding to one scan line so that current from a constant current source which holds the constant intensity state is supplied to the light emitting element in a state in which a constant both end voltage is set in the light emitting element by the voltage setting means.

Allowable Subject Matter

5. Claims 15 and 17 are allowed.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Abbas I. Abdulsalam whose telephone number is 7033058591. The examiner can normally be reached on Monday through Friday from 9:00 A.M. to 5:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe, can be reached on 571-2727691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

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applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Abbas Abdulsalam

Examiner

Art Unit 2629

April 27, 2007



RICHARD HJERPE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600